

AMENDMENTS TO THE CLAIMS:

Please amend the Claims as follows:

1. (Currently Amended) A suspension stop for a motor vehicle wheel assembly, the wheel assembly comprising a fixed member adapted to be fixed to a chassis of a vehicle and a rotating member adapted to be fixed to a suspension spring so as to be rotationally moved under the effect of the forces exerted by the spring, said stop comprising a device for measuring vertical forces applied to the vehicle wheel, the device comprising a pulse-generating coder fixed to one of the members, a sensor fixed to the other member and able to detect pulses from the coder so as to determine the angular position of the rotating member with respect to the fixed member, and a calculation means for calculating, from this position, the corresponding vertical force applied.

2. (Previously presented) The stop according to Claim 1, further comprising a bearing provided with a fixed top race forming the fixed member, a rotating bottom race forming the rotating member and rolling bodies disposed between the races.

3. (Previously presented) The stop according to Claim 2, further comprising a top cup associated with the top race and adapted to be associated with the chassis, and a bottom cup associated with the bottom race and provided with a housing adapted to fixedly receive an end of the suspension spring.

4. (Previously presented) The stop according to Claim 3, the sensor is associated with the top cup so that sensitive elements of the sensor are positioned opposite to and at an air gap distance from the coder.

5. (Previously presented) The stop according to Claim 2, wherein the sensor is associated with the top race so that sensitive elements of the sensor are positioned opposite to and at an air gap distance from the coder.

6. (Previously presented) The stop according to Claim 1, wherein the sensor is associated with the chassis so that sensitive elements of the sensor are positioned opposite to and at an air gap distance from the coder when the stop is mounted on the said chassis.

7. (Previously presented) The stop according to any one of Claims 2 to 6, wherein the coder is associated with the bottom race.

8. (Previously presented) The stop according to any one of Claims 3 to 6, wherein the coder is associated with the bottom cup.

9. (Previously presented) The stop according to any one of Claims 3 to 6, wherein the bottom cup comprises a part on which the coder is produced.

10. (Previously presented) The stop according to Claim 3, wherein the bottom and top cups comprise extensions which cooperate so as to form a static sealing means.

11. (Previously presented) The stop according to Claim 3, wherein at least one of the coder and the cups comprise extensions which rub on one face of the stop so as to form a dynamic sealing means.

12. (Previously presented) The stop according to Claims 1, wherein the sensor comprises sensitive elements chosen from amongst Hall effect sensors, magnetoresistors and giant magnetoresistors.

13. (Previously presented) The stop according to Claim 1, wherein the coder is formed from a multipole magnetic ring made from synthetic material containing ferrite particles on which there are magnetised a plurality of pairs of North and South poles equally distributed with a constant angular width.

14. (Previously presented) A method of measuring vertical forces applied to a wheel associated with the chassis of a motor vehicle by means of a stop according to Claim 1, in which, in addition to the angular position of the rotating member, the steering angle of the wheels and/or the value of the extent to which the suspension is pressed down are used by the calculation means.